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石 铸
(中国科学院植物研究所,北京 100044)

NEW SPECIES OF THE CHINESE COMPOSITAE

Shih Chu
(*Institute of Botany, Academia Sinica*, Beijing, 100044)

Key words Compositae; *Youngia*; *Crepis*; *Dubyaea*; *Paraprenanthes*; *Scorzonera*; *Stenoseris*; *Faberia*

关键词 菊科;黄鹌菜属;还阳参属;厚喙菊属;假福王草属;鸦葱属;细莴苣属;花佩属

1 矮小黄鹌菜 新种 图1:1—2

Youngia yilingii Shih, sp. nov.

Species nostra *Y. lanatae* Babcoc. et Stebbins affinis sed foliis glabris differt.

Herba parva perennis, radice gracili, 1—1.5 mm vel vix 1 mm in diametro. Caulis gracillimus, 3—5 cm altus, basi 0.2—0.3 mm in diametro, reliquiis petiolorum veterum brunneis vel pallide nigrescentibus, simplex vel e basi 1-vel 2-ramosus, ramis pergracilibus villis multicellularibus noduliformibus sparsim obtectis. Folia basalia spathulata, elliptica, oblanceolata vel irregulariter hastata, margine integra vel obscure obtuse 1—2-dentata vel -repanda, petiolis inclusis 1 cm vel vix 1 cm longa, 0.3 cm lata, apice rotundata, acuta vel obtusa, basi in petiolos breves 5 mm longos alatos vel late alatos cuneato-attenuata; folia caulina nulla vel 1—2 ad furcas ramorum inflorescentiae, minima, subulato-linearia, bracteiformia; omnia utrinque glabra. Calathidia solitaria vel 2—3, irregulariter corymboso-disposita. Flosculi 11 in numero, ligulati, flavi. Involucrum sub anthesi anguste campanulatum, 6.5 mm longum, sub fructu viridi-nigrum, cujus phyllis 4-seriatis, extremis externisque brevissimis, ovatis, 1 mm longis et latis, apice acutis vel obtusis, intimis internisque lanceolatis, 6.5 mm longis, 1 mm latis, dorso juxta apicem corniculatis, omnibus extus glabris. Achaenia nigro-brunnea, fusiformia, 2.8 mm longa, costis 14, inaequalibus, spinulosis, apicem versus angustata, erostrata. Pappus 5 mm longus, albus.

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* 本文插图由蔡淑琴同志绘制,谨此致谢。

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Yunnan (云南):Zhongdian (中甸), in declivitate, alt. 3000 m, 1937-06-04, T. T. Yu (俞德浚) 11568 (Typus, PE).

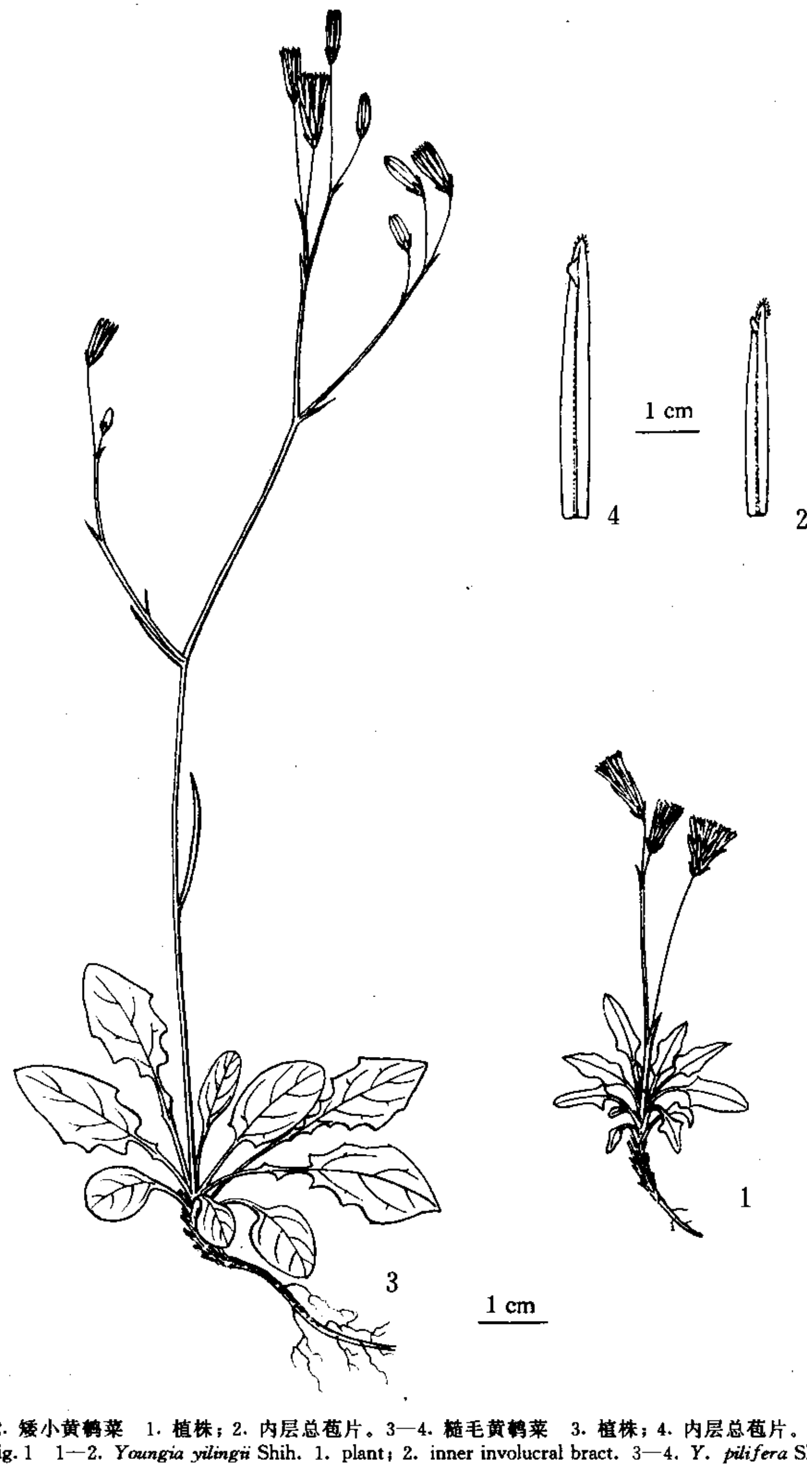


图1 1—2. 矮小黄鹌菜 1. 植株; 2. 内层总苞片。3—4. 糙毛黄鹌菜 3. 植株; 4. 内层总苞片。(蔡淑琴绘)
Fig. 1 1—2. *Youngia yilingii* Shih. 1. plant; 2. inner involucral bract. 3—4. *Y. pilifera* Shih
3. plant; 4. inner involucral bract.

2　怒江黄鹌菜　新种　图2:2

Youngia nujiangensis Shih, sp. nov.

Species nostra *Y. piliferae* Shih affinis, sed involucris minoribus, 7 mm longis, foliis ellipticis, longe ellipticis, longe elliptico-oblanceolatis differt.

Herba perennis, radice verticali vel obliqua. Caulis 15 cm altus, basi 1 mm in diametro, reliquiis petiolorum veterum brunneis, e basi pauce et longe ramosus, omnino parce sed sub calathidiis dense pubescens. Folia basalia rosularia, elliptica, longe elliptica, vel longe oblanceolato-elliptica, 1.5—3 cm longa, 0.5—1.2 cm lata, apice obtusa vel acuta, margine integra, sparsim dentata vel inconspicue pinnatifida, basi in petiolos alatos, 1—2.5 cm longos attenuata; folia caulina nulla vel fere nulla vel ea ad furcas ramorum inflorescentiae subulata vel lineari-subulata, minima; omnia textura crassa, utinque laxe hirtella. Calathidia 3—8 in numero, ad apicem ramorum et caulis inflorescentiam corymbosam formantia. Flosculi 12 in numero, ligulati, flavi, tubis glabris. Involucrum anguste cylindricum, 7 mm longum, cujus phylla 4-seriata, extrema et externa triangulata vel late triangulata, 1—1.5 mm longa, 1 mm vel vix 1 mm lata, apice acuta vel obtusa, intima et interna lanceolata, 7 mm longa, 1 mm lata, intus glabra; omnia extus glabra, sub fructu nigro-viridia. Achaenia fusiformia, brunnea, 3.8 mm longa, costis 14, inaequalibuss spinulosis. Pappus albus 5 mm longus, inconspicue scaber.

Yunnan (云南): Nujiang (怒江). alt. 1750 m, 1938-06-26, T. T. Yu (俞德浚) 19199 (Typus, PE).

3　糙毛黄鹌菜　新种　图1:3—4

Youngia pilifera Shih, sp. nov.

Species nostra *Y. terminali* Babcok. et Stebbins affinis, sed caulibus inferne sericeis, foliis utrinque hirtellis differt.

Herba perennis, radice gracili, verticali vel obliqua. Caulis 8—30 cm altus, basi vix 1 mm in diametro, reliquiis petiolorum veterum brunneis, inferne sericeus, superne glaber, e basi vel medio pauce ramosus, sed plerumque superne corymboso-ramosus, ramis gracilibus. Folia basalia indivisa, ovato-elliptica, late ovata, orbicularia vel elliptica, 0.7—2 cm longa, 0.6—1.5 cm lata, apice rotundata vel obtusa, margine integra, basi late cuneata vel rotundata, petiolata, petiolis 1—1.8 cm longis, vel lyrato-pinnatipartita, -pinnatilobata, ambitu oblanceolata, 1—3 cm longa, 1.2 cm lata, petiolata, petiolis 1—1.5 cm longis, sericeis, lobis terminalibus ellipticis vel hastatis vel irregulariter hastatis, apice rotundatis vel obtusis, margine integris vel remote magno-dentatis, lobis lateralibus 2—4-jugis, triangularibus, ellipticis, margine integris, apice acutis, rotundatis vel obtusis; folia caulina pauca, 1—2 in numero, longe elliptica, apice longe acuta, basi attenuata, sessilia; ea ad furcas ramorum inflorescentiae subulata, minima; omnia utrinque hirtella. Calathidia pauca, ad apicem ramorum et caulis inflorescentiam corymbosam vel corymboso-paniculatam formanntia. Flosculi 11 in numero, ligulati flavi, tubis pubescentibus. Involucrum anguste cylindricum, 8—10

mm longum, sub fructu nigro-viride, cujus phyllis 4-seriatis, extremis externisque brevissimis, late ovatis, 1.5 mm longis et latis, apice acutis vel obtusis, intimis internisque longis-



图 2 1. 戟裂黄鹌菜；2. 怒江黄鹌菜。(蔡淑琴绘)
Fig. 2 1. *Youngia hastiformis* Shih; 2. *Y. nujiangensis* Shih.

simis, lanceolatis, 7—8 mm longis, 1 mm latis, apice acutis vel obtusis, dorso glabris, juxta apicem corniculatis, intus hirtellis. Achaenia immatura. Pappus albus 5 mm longus.

Sichuan (四川): Kangding (康定), in valle, alt. 3200 m, 1982-07-30, K. Y. Lang (郎楷永) 754; ibid, in valle, alt. 3600 m, 1963-07-20. K. J. Kuan et W. T. Wang (关克俭与王文采) 788 (Typus, PE); ibid. 1934-07-11, Z. S. Liou (刘振书) 684; ibid. alt. 3300 m, inter frutices, K. Y. Lang (郎楷永) 650.

4 娟毛黄鹌菜 新种

Youngia sericea Shih, sp. nov. ——*Youngia gracelipes* auct. non (Hook. f.) Babcok. et Stebbins: Y. C. Tang in C. Y. Wu, Fl. Xizangica **4**:965. 1985, p. p.

Herba rosularia perennis, 3—6 cm alta, radice verticali. Caulis principalis inconspicuus, e basi breviter et graciliter ramosus, omnino, vel sub calathidia densius sericeus. Folia basalia, vel subbasalia, ambitu oblaneolata vel longe elliptica, 1—3.5 cm longa, 0.4—1.5 cm lata, utrinque crispato-pubescentia, pinnatipartita, lobis lateralibus 4—5-jugis, oppositis vel obliquis, anguste triangularibus, late falcatis, apice acuminatis, margine fere integris vel latere 1-dentatis, lobis terminalibus longe ellipticis, longe triangulatis vel orbicularibus, apice acutis, rotundatis obtusisve. Calathidia 5—9 in numero, in rosula foliorum inconspicue corymboso-disposita. Flosculi 9 in numero, ligulati flavi, tubis glabris. Involucrum campanulatum, 1 cm longum, cujus phylla 4-seriata, extrema externaque longe ovata usque ad lanceolata, 2—3 mm longa, circiter 1 mm lata, apice obtusa vel acuta, intima internaque lanceolata, 1 cm longa, 1.4 mm lata, apice acuta vel obtusa, margine albo-membranacea, intus glabra, omnia sub fructu nigro-viridia, extus adpresso-crispato-albo-sericea. Achaenia nigra, costis 14, inaequalibus, spinulosis, apice truncata, erostrata. Pappus albus, 6 mm longus.

Ex affinitate Y. *gracilipidi* (Hook. f.) Babcok. et Stebbis., a qua differt involucri phyllis extus sparse albo-sericeis.

Xizang (西藏): Zayü (察隅), in declivitate petrosa, alt. 3400 m, 1935-09, C. W. Wang (王启无) 66254 (Typus, PE); ibid., in declivitate glareosa, alt. 3300 m, 1973-06-21, Qinghai-Xizang Exped. (青藏队) 73-273 (Typus, PE).

5 戟裂黄鹌菜 新种 图 2:1

Youngia hastiformis Shih, sp. nov.

Ex affinitate Y. *wilsonii* Babcok. et Stebbins, e ea differt segmentis terminalibus foliorum hastatis.

Herba annua. Caulis erectus, 27 cm altus, superne corymboso-ramosus, omnino glaber, basi 1 mm in diametro. Folia inferiora mediaque pauca, 2—3 in numero, ambitu elliptica, 4.5 cm longa, 1.5 cm lata vel lanceolata, 5.5 cm longa, 2 cm lata, pinnatisecta vel lyrato-pinatisecta, segmentis terminalibus triangularibus vel hastatis, segmentis lateralibus triangularibus 1—3-jugis, oppositis vel alternatis vel obliquis, omnibus apice acutis vel acuminatis, margine integris, utrinque glabris; folia superiora linearia, utroque acuminata,

basi in petiolos breviores angustata; folia sub calathidiis lineari-subulata, minima. Calathidia pauca, 7 in numero, ad apicem caulis et ramorum inflorescentiam corymbosam formantia. Involucrum anguste cylindricum, 7 mm longum, sub fructu nigro-viride, cujus phylla 4-seriata, extrema externauqe brevissima, ovata, vix 1 mm longa et lata, apice acuta, intima internaque lanceolata 7 mm longa, 1 mm lata, intus hirtella, extus glabra. Flosculi ligulati, flavi. Achaenia fusiformia, 2—2.5 mm longa, apice truncata, costis 11, inaequalibus, spinulosis. Pappus albus, 5 mm longus.

Sichuan (四川): Heishui (黑水), ad ripam, alt. 2500 m, 1957-07-21, Li Xin (李馨) 73707 (Typus, PE)

6 康定黄鹌菜 新种

Youngia kangdingensis Shih, sp. nov.

Ex affinitate *Y. yilingii* Shih, e ea differt foliis utrinque papiloso-pilosis.

Herba parva perennis, radice graciliore, verticali vel obliqua. Caulis fere nudus, gracillimus, 7—14 cm altus, e basi vel medio corymboso-ramosus, glaber vel sub calathidiis sparsim pubescens. Folia basalia ambitu oblanceolata vel elliptica, 0.9—2 cm longa, 0.5 cm lata, petiolata, petiolis 0.5 cm longis, vel pinnatipartita, pinnatisecta, lobis terminalibus ellipticis, oblique triangularibus, margine integris, lobis lateralibus 1—3-jugis, auriculiformibus, vel indivisa, linearia vel lineari-lanceolata, basi in petiolos breves cuneato-angustata; folia ad furcas ramorum inflorescentiae minima, subulata vel bracteiformia; omnia utrinque vel subtus papiloso-pilosa. Calathidia 3—5 in numero, ad apicem caulis et ramorum inflorescentiam corymbosam irregulariter formantia, pedunculis gracillimis et longioribus. Flosculi 15 in numero, flavi ligulati. Involucrum anguste cylindricum, 8 mm longum, cujus phyllis 4-seriatis, extremis externisque brevissimis, triangularibus vel ovatis, 1 mm longis, vix 1 mm latis, apice obtusis, intimis intermisque longissimis, longe ellipticis, 8 mm longis, 1.2 mm latis, ad apicem dorso corniculatis, omnibus extus glabris. Achaenia fusiformia, 3.4 mm longa, costis 12, inaequalibus, spinulosis, erostrata. Pappus 5.4 mm longus, albus.

Sichuan (四川): Kangding (康定), inter frutices alpinos, alt. 3300 m, 1982-07-26, K. Y. Lang et al. (郎楷永等) 650 (Typus, PE).

7 尖裂黄鹌菜 新种

Youngia cristata Shih et Cai*, sp. nov.

Y. parvae Babcok. et Stebbins valde similis, sed differt aliquibus phyllis intimis internisque dorso juxta apicem corniculatis.

Herba caespitosa perennis rosularis, 4 cm alta, caule principali brevissimo inconspicuo, superne inconspicue corymboso-ramoso, omnino sparse tomentosa vel glabrescenti. Folia densa, caulina, tamquam rosularia, basi in petiolum alatum 2 cm longum angustata, utrinque sparse tomentosa, ambitu oblanceolata, 2—2.5 cm longa, 1 cm lata, pinnatipartita,

* Cai Chu-qin (蔡淑琴)

pinnatifida vel pinnatilobata, lobis lateralibus 4—6-jugis, inaequalibus, anguste triangularibus, apice acutis, infimis dentiformibus. Calathidia pauca, pedunculata, pedunculis albo-tomentosis. Flosculi 14, ligulati, flavi, tubis glabris. Involucrum cylindrico-campanulatum, 8—9 mm longum, nigro-viride, cujus phyllis 4-seriatis, extremis externisque brevissimis, ovatis vel lanceolatis, 2—4 mm longis, 1—1.5 mm latis, apice obtusis vel acutis, intimis internisque lanceolatis, 8—9 mm longis, 1.5 mm latis, apice longe acutis, intus glabris, aliquibus dorso juxta apicem corniculatis, omnibus glabris. Achaenia immatura, apice truncata. Pappi setae 2-seriatae, albae, 7 mm longae, minute scaberulae.

Xizang (西藏): Zayü (察隅), alt. 3900 m, 1935-09, C. W. Wang (王启无) 66121 (Typus, PE).

8 沙湾还阳参 新种 图 3:1

Crepis shawanensis Shih, sp. nov.

Ex affinitate *C. chrysanthae* (Ledeb.) Turcz., e qua differt foliis ellipticis, utrinque laxa hirsutis.

Herba perennis, rhizomate brevi crasso. Caulis 30—50 cm altus erectus, eramosus, inferne dense, superne laxe hirsutus, sub calathidiis laxe hirsutus et sericeus. Folia basalia elliptica, petiolis inclusis 5—9 cm longa, 2 cm lata, basi in petiolos anguste alatos cuneato-angustata; folia inferiora mediaque longe elliptica, apice acuta, basi cuneata, sessilia vel breviter petiolata; folia superiora minora vel minima, lanceolata vel lanceolato-subulata vel subulata; omnia utrinque laxe hirsuta, margine apiculata. Calathidium solitarium, sub eo e axillis foliorum superiorum subulatorum calathidiis 1—2 obsoletis. Flosculi ligulati, flavi, tubis glabris. Involucrum campanulatum, cir. 8 mm longum, cujus phyllis 4-seriatis, extremis externisque inaequalibus, lanceolatis usque ad 3 mm longis, 1 mm latis, apice acutis, intimis internisque lanceolatis, 8 mm longis, 1 mm latis, apice acutis, margine membranaceis, intus glabris, omnibus extus secus costas medias nigro-hirsutis. Achaenia immatura. Pappus albus.

Xinjiang (新疆): Shawan (沙湾), in declivitate aprrica, alt. 1750 m, 1965-07-18, T. Y. Chou (周太炎) 651044 (Typus, PE).

9 草甸还阳参 新种 图 4:1

Crepis pratensis Shih, sp. nov.

Species nostra *C. tectis* L. affinis, sed involucri phyllis extus glabris differt.

Herba perennis, radice elongata, verticali vel obliqua. Caulis solitarius, nudus vel fere nudus, 15—50 cm altus, superne paniculato-, vel paniculato-corymboso-ramosus, omnino glaber, basi reliquiis petiolorum veterum brunneis. Folia basalia et infima numerosa, spathulata, ligulata, longe elliptica vel linearia, petiolis inclusis 3—11 cm longa, 0.7—1.5 cm lata, basi in petiolos longiores vel breviores angustata, apice acuta, margine acuto-serrulata vel fere integra vel integra; folia inferiora pauca, linearia, anguste linearia, lineari-subulatave, minora, margine pauco-serrulata vel integra; omnia textura crassa, utrinque glabra. Ca-

lathidia pauca, 4—26 in numero, ad apicem ramorum et caulis inflorescentiam corymbosam, paniculatam vel paniculato-corymbosam formantia. Flosculi ligulati, flavi, 11 in numero, tubis glabris. Involucrum campanulatum, nigro-viride, 1.1 cm longum, cujus phyllis



图 3 1. 沙湾还阳参; 2. 全叶还阳参。(蔡淑琴绘)
Fig. 3 1. *Crepis shawanensis* Shih; 2. *C. integrifolia* Shih.

4-seriatis extremis externisque ovatis, elliptico-ovatis vel ellipticis, inaequilongis, usque ad 4 mm longis, 1.2 mm latis, apice acutis, intimis internisque lanceolatis, longe elliptico-lanceolatis, 1.1 cm longis, 2 mm latis, apice acutis vel obtusis intus glabris; omnibus extus glabris. Achaenia 5 mm longa, brunnea, costis aequalibus 10, spinulosis, apice truncata,



图 4　1. 草甸还阳参；2. 长苞还阳参。（蔡淑琴绘）
Fig. 4　1. *Crepis pratensis* Shih; 2. *C. pseudonaniforma* Shih.

erostrata. Pappus albus, 7 mm longus.

Qinghai（青海）：Da Qaidam（大柴达木），Da Qaidam Lake（大柴达木湖），ad lacum，alt. 3100 m，1959-07-16，Gansu-Qinghai Exped.（甘青队）334（Typus，PE）；Xiao Qaidam Lake（小柴达木湖），in palude，alt. 3160 m，1959-07-15，Gansu-Qinghai Exped.（甘青队）274；Mahai（马海），id. 211；Leng Hu（冷湖），ad lacum，alt 2790 m，id. 542；Xiao Qaidam Lake（小柴达木湖），alt. 3160 m，id. 295；Golmud（格尔木），in palude，id. 500；Qaidam Basin（柴达木盆地），alt. 2880 m，Qaidam Exped.（柴达木调查队）108.

10 长苞还阳参 新种 图 4:2

Crepis pseudonaniforma Shih，sp. nov.

Ex affinitate *C. naniformae* Babcok.，e qua bene differt foliis ellipticis vel oblanceolatis.

Herba perennis，radice elongata，pauce brunneo-gemmata. Caulis solitarius，17 cm altus，basi reliquiis petiolorum veterum brunneis. Folia inferiora mediaque petiolis inclusis 5—9 cm longa，5—11 mm lata，elliptica vel oblanceolata，apice rotundata，mucronulata vel non mucronulata，margine raro dentata，in petiolos 3—5.5 cm longos cuneato-angustata；folia superiora et ea ad furcas ramorum inflorescentiae linearia vel oblanceolata，basi cuneata，sessilia vel fere sessilia，margine integra vel fere integra；folia in pedunculis minima，subulata，bracteiformia；omnia utrinque glabra. Calathidia 8—12 in numero，ad apicem ramorum et caulis inflorescentiam corymbosam formantia. Flosculi ligulati，11 in numero，flavi，tubis glabris. Involucrum anguste cylindricum，1.1 cm longum，cujus phyllis 4-seriatis，extremis externisque longe ovatis vel lanceolatis，1.2—2 mm longis，1 mm latis，apice acutis，intimis internisque anguste lineari-ellipticis，1.1 cm longis，1 mm latis，apice acutis vel obtusis，margine albo-membranaceis，intus glabris，omnibus extus glabris. Achaenia brunnea，fusiformia，6 mm longa，costis 9，non spinulosis. Pappus albus，gracilis，7 mm longus.

Xinjiang（新疆）：Zhaosu（昭苏），1957-08-14，K. C. Kuan（关克俭）3501（Typus，PE）.

11 天山还阳参 新种 图 5

Crepis tianshanica Shih，sp. nov.

Ex affinitate *C. flexuosae*（Ledeb.）Turcz.，e ea differt invulucris campanulatis，cujus phyllis extus albo-sericeis.

Herba perpennis parva，radice gracili，pauce gemmata. Caulis erectus 3—5 cm altus，sparsim vel superne densius pubescens. Folia lyrato-vel fere lyrato-pinnatisecta，-pinnatipartita，ambitu lanceolata，utrinque sparsim pubescentia vel non pubescentia，petiolis pubescentibus vel non pubescentibus inclusis 2.5—4 cm longa，0.5—0.8 cm lata，lobis lateralibus 3—4-jugis，oppositis，alternatis vel obliquis，ellipticis vel triangularibus vel rhomboideis vel irregulariter rhombideis，apice acutis，rotundatis vel ob-tusis，margine integris sed eis inferioribus minoribus dentiformibus；lobis terminalibus ellipticis，ovatis，hastatis vel saggitatis，

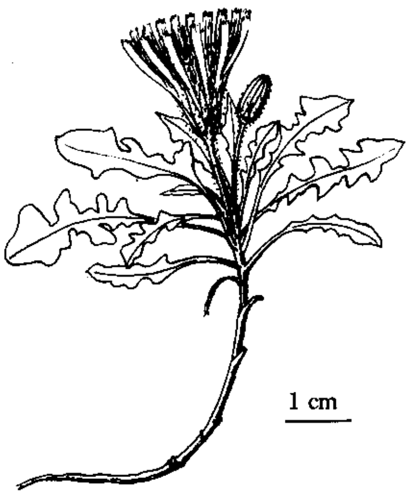


图 5　天山还阳参。(蔡淑琴绘)
Fig. 5　*Crepis tianshanica* Shih.

apice acutis vel obtusis. Calathidia majora, 2 in numero, cymoso-disposita. Involucrum campanulatum, 1.2 cm longum, nigrum, cujus phyllis 4-seriatis, extremis exterisque brevibus vel brevioribus, longe elliptico-lanceolatis, usque ad 7 mm longis, 1.2 mm latis, apice acutis, internis intimisque lanceolatis vel longe elliptico-lanceolatis, 1.2 cm longis, 2.5 mm latis, intus glabris, omnibus extus sparsim albo-sericeis, secus costas medias nigro-multicellulari-hirsutis. Flosculi numerosi, flavi, ligulati. Achaenia immatura. Pappus albus.

Xinjiang (新疆): Tianshan Mt. (天山), Daniu He (大牛河), in declivitate, alt. 2600 m, 1947-07-23, K. C. Kuan (关克俭) 2212 (Typus, PE).

12　全叶还阳参　新种　图 3:2

Crepis integrifolia Shih, sp. nov.

Herba perennis, rhizomate prostrato. Caulis erectus, solitarius, superne corymboso-ramosus, infra medium glaber, superne et sub calathidiis glandulis capitatis stipitatis obtectus. Folia basalia minora, lanceolata (?), longe petiolata; folia media inferioraque lanceolata vel oblanceolata, 3.5—5 cm longa, 1—2 cm lata, apice rotundata vel acuta, mucronulata, sessilia, basi auriculato-amplexicaulia, margine integra vel subintegra; folia superiora minora, lanceolata; ea ad furcas ramorum inflorescentiae minima, subulata; omnia utrinque glabra. Calathidia 3—4 in numero, ad apicem caulis et ramorum inflorescentiam corymbosam formantia. Involucrum campanulatum, 1 cm longum, cujus phyllis 3—4-seriatis, extremis externisque lanceolatis 3 mm longis, 0.8 mm latis, intimis externisque longe lanceolatis, longe elliptico-lanceolatis, usque ad 1 cm longis, 1 mm latis, intus glabris, omnibus apice acutis, extus nigro-viridibus, secus costas medias glandulis capitatis stipitatis nigris. Flosculi numerosi, flavi, ligulati, tubis pubescentibus. Achaenia fusiformia 5 mm longa, apice truncata, erostrata, costis 15 aequalibus. pappus albus, 6 mm longus.

Xinjiang (新疆): Alta Prefecture (阿勒太地区), Karamayin (克拉玛因) alt. 1370 m, 1987-08-20, K. Y. Lang et F. Konta (郎楷永与近田文弘) 159 (Typus, PE).

13　峨眉厚喙菊　新种

Dubyaea emeiensis Shih, sp. nov.

Herba perennis, rhizomate crasso, radices graciles edente. Caulis erectus, solitarius, 13 cm latus, infra medium purpureus, glaber, supra medium vel superne pallide viridis, dense

longe brunneo-hispidus, apice agglomerato-corymboso-ramosus, ramis aequilongis. Folia inferiora mediaque alternata, longe oblanceolato-elliptica, longe elliptica vel elliptica, 5—9 cm longa, 2—3 cm lata, apice acuta vel acuminata, basi in petiolos 1.5—2.5 cm longos purpureos cuneato-angustata, vel sessilia; ea superiora subopposita, lanceolata, 5—6 cm longa, basi rotundata vel late cuneata, sessilia; ea ad furcas pedunculorum minima, lanceolata vel late linearia, sessilia, apice longe vel breviter acuminata; omnia textura crassiuscula, margine serrata, utrinque glabra, laevia, subtus valde purpurea. Calathidia 7 in numero, agglomerato-corymboso-disposita, pedunculis aequilongis, crassiusculis, hispidis. Flosculi ligulati, 24 in numero. Involucrum nigro-viride, anguste campanulatum, 1.3 cm longum, cujus phyllis 3—4-seriatis, imbricatis, seriem interiorem versus longioribus, extremis triangularibus, 4.5 mm longis, 1.2 mm latis, apice acutis, intimis longe ellipticis, 1.3 cm longis, 2 mm latis, apice obtusis vel rotundatis, omnibus dorso ad costas medias longe hispidis, sed seriem interiorem versus sparsim vel fere glabris. Achaenia brunnea, clavata, leviter dorsi-ventraliter compressa, 5 mm longa, costis 14, inaequicrassa, erostrata. Pappi setae 2-seriata, leviter flavae; 7 mm longae, serrulatae.

Sichuan (四川) Emei Mt. (峨眉山), 1952-07-27, X. P. Jiang (蒋兴麟) 31803 (Tupus, PE).

Species insignis calathidis agglomerato-dispositis, pedunculis fere aequilongis, crassiusculis, a speciebus ceteris sinensibus bene distincta.

14 戟叶假福王草 新种 图 6

Paraprenanthes hastata Shih, sp. nov.

Herba perennis. Caulis solitarius, erectus, 80 cm altus, superne paniculato-ramosus, ramis gracilibus, omnino villis multicellularibus noduliformibus obtectus, sed superne densius. Folia inferiora hastata, 12 cm longa, 5—7 cm lata, apice acuminata, margine irregulariter repando-crenata vel-crenulata vel obscure crenulata, solummodo repanda, petiolata, petiolis 9 cm longis; ea media triangulata, triangulato-hastata vel lance-olata, 11—13 cm longa, 3—5 cm lata, alato-petiolata, petiolis 2—5 cm longis, margine repando-crenata, apicibus crenae mucronulatis vel margine inferne latere 1-sinuata; ea su-periora lanceolata, margine obscure apiculata, apice longe acuminata, petiolata, petiolis 0.5—2 cm longis; omnia textura tenuia, utrinque glabra. Calathidia numerosa, in apicem caulis et ramorum inflorescentiam paniculatam formantia. Flosculi 12 in numero, purpurei, ligulati. Invulocrum anguste cylindricum, 7 mm longum, cujus phyllis 4-seriatis, extremis externisque brevissimis, lanceolatis, usque ad 4 mm longis, 1 mm latis, intimis internisque longissimis, longe ellipticis, 8.5 mm longis, 1 mm latis; omnibus apice obtusis. Pappus albus 5.5 mm longus, scabrellus. Achaenia immatura.

Sichuan (四川): Chongqing (重庆), Beipei (北碚), Jinyun Mt. (缙云山), 1992-06-15, C. X. Yang (杨昌熙) 3934 (Typus, PE).

Ex affinitate *P. sylvicolae* Shih, ab ea differt caule pedunculisque villis multicellalaribus



图 6　戟叶假福王草。(蔡淑琴绘)
Fig. 6　*Paraprenanthes hastata* Shih.

noduliformibus obtectis et forma foliorum.

15 绿春假福王草 新种

Paraprenanthes luchunensis Shih, sp. nov.

Species *P. prenanthoidi* (Hemsl.) Shih affinis, sed foliis omnibus divisis differt.

Herba annua, 50—100 cm alta. Caulis erectus, solitarius, superne corymboso- vel corymboso-paniculato-ramosus, ramis omnino villis multicellularibus noduliformibus vel villis multicellularibus noduliformibus capitellatis stipitatis obtectis. Folia radicalia et caulina inferiora lyrato-pinnatisecta, petiolata, petiolis, usque ad 11 cm Longis, lobis terminalibus majoribus, lanceolatis, 9 cm longis, 2.5—3 cm latis, apice acuminatis, lobis lateralibus 1—2-jugis, elliptcis, apice obtusis vel acutis, mucronulatis, basi late confluentibus, omnibus margine integris vel apiculatis; folia media superioraque radicalibus et caulinis inferioribus similia, sed minora; omnia textura tenuia utrinque glabra. Calathidia numerosa, ad caulem et ramos in inflorescentiam corymbosam vel corymboso-paniculatam terminalem disposita. Involucrum cylindricum, 1.2 cm longum, 2 mm latum, phyllis 3—4-seriatis, extimis et exterioribus brevissimis, 2 mm longis, vix 1 mm latis, apice acutis, intimis interioribusque longissimis longe lanceolatis, 1.2 cm longis, 2 mm latis, apice acutis omnibus glabris. Flosculi ligulati, pallide rosei, 12 in numero. Achaenia atrata, 4 mm longa, superne breviter attenuata, apice albida, erostrata. Pappi setae albae, 5 mm longae, obscure minute scabridae.

Yunnan (云南): Luchun (绿春), alt. 1200 m, 1974-05-07, Exp. Luchun (绿春队) 460; Luchun (绿春), 1974-06-12, Exp. Luchun (绿春队) 1895 (Typus, PE).

16 长柄假福王草 新种

Paraprenanthes gracilipes Shih, sp. nov. ——*Prenanthes gracilipes* Chang in sched.

Species *P. sororiae* (Miq.) Shih affinis, sed foliis utrinque villis multicellularibus noduliformibus sparce obtectis differt.

Herba annua, 60 cm alta. Caulis erectus, superne paniculato-ramosus, ramis gracilibus, glabris. Folia radicalia et caulina inferiora ignota; folia caulina media lyrato-pinnatisecta, petiolata, petiolis 3—13 cm longis, villis multicellularibus noduliformibus obtectis, lobis terminalibus majoribus, triangulato-hastatis vel fere late triangulatis, 8—10 cm longis 6—9 cm latis, apice breviter acuminatis, margine inaequaliter serratis, basi leviter hastatis, raro truncatis, lobis lateralibus 1-jugis, ellipticis 3—4 cm longis, 1.5—2.5 cm latis, apice acutis, margine serratis; vel folia caulina media interdum indivisa, triangulato-hastata, petiolata, petiolis 8 cm longis; folia superiora triangulato-lanceolata, 4.5 cm longa, 3 cm lata, petiolata, petiolis 1.5 cm longis, alatis, basi late cuneata, margine serrata; folia suprema longe elliptica, 3.5 cm longa, 0.6 cm lata, apice acuminata, basi cuneato-attenuata, sessilia; omnis utrinque villis multicellularibus noduliformibus sparse obtecta. Calathidia numerosa, ad caulem et ramos in inflorescentiam paniculatam disposita. Involucrum cylindricum, 9 mm longum, 2 mm latum; involucri phylla 4-seriata, extima et exteriora breviora, ovata vel lanceolata, 2—2.8 mm longa, 1 mm lata, apice acuta vel obtusa, intima et in-

teriora longiora, lanceolata, vel longe elliptica, 9 mm longa, 1.5 mm lata, apice obtusa; omnia extus pallide rosea, glabra. Flosculi ligulati, albi, 4 in numero. Achaenia immatura. Pappi setae albae, scabridae.

Sichuan (四川): Emei Mt. (峨眉山), in sylva, alt 2500 m, 1935-08-29, T. H. Tu (杜大华) 693 (Typus, PE).

17 南川花佩 新种 图 7

Faberia nanchuanensis Shih, sp. nov.

Ex affinitate *F. lanceifoliae* Anth., ab ea differt forma foliorum.

Herba perennis. Caulis solitarius, erectus, 34 cm altus, basi 2.5 mm in diametro, infra medium paniculato-ramosus, omnino glaber. Folia basalia numerosa, longe elliptica, 8—10 cm longa, 1—1.5 cm lata, apice breviter acuminata, basi in petiolos longos cuneato-angustata, petiolis 5—8 cm longis, margine sparsim obscure repando-serrulatis; folia caulina 6 in numero, apice acuminata vel longe acuminata, longe elliptica vel ea suprema longe linearia, ea infima petiolata, petiolis 6 cm longis, ea suprema sessilia, basi cuneato-angustata; omnia textura coriacea, glabra, laevia, subtus purpurea. Calathidia 12 in numero, paniculato-disposita. Involucrum in statu explanato late cuneatum, cujus phyllis 4-seriatis, obscure imbricatis, extremis externisque ovato-triangularibus vel longe ovatis, usque ad 5 mm longis, 1.5 mm latis, intimis internisque longe ellipticis, usque ad 1.3 cm longis, 1.5 mm latis; omnibus extus glabris, viridibus, apice acutis vel obtusis. Flosculi numerosi caerulei, ligulati. Achaenia immatura.

Sichuan (四川): Nanchuan (南川), prope fossas in locis humidis, 1957-06-28, J. H. Xiong et Z. L. Zhou (熊济华与周子林) 91698 (Typus, PE).

18 耳叶细莴苣 新种

Stenoseris auriculiformis Shih, sp. nov.

Species insignis foliis auriculiformi- vel codato-amplexicaulibus, a speciebus ceteris sinensibus bene distincta.

Herba annua, radicibus fibrosis numerosis. Caulis erectus, solitarius, 75 cm altus, basi 2 mm in diametro, superne corymboso-ramosus, ramis gracilibus, omnino glaber. Folia basalia sub anthesi emarcida; ea media petiolata, petiolis 3—9 cm longis, basi eorum auriculiformi-amplexicaulibus, lyrato-pinnatisecta vel -pinnatipartita, lobis lateralibus 1—2 jugis, ellipticis vel longe ellipticis, 0.7—2.5 cm longis, 0.8—1.8 cm latis, apice obtusis vel rotundatis, mucronulatis, margine integris vel pauco-serrulatis, -apiculatis, lobis terminalibus triangularibus vel cordatis, 3—4 cm longis, 2.5—3 cm latis, apice acutis, mucronulatis, margine repandis, pauco-serruratis vel -apiculatis; ea media superioraque longe cordata vel -ovata, sessilia, basi valde cordato-amplexicaulia, margine integra, apice longe acuta; omnia textura tenuia, utrinque glabra. Calathidia numerosa, corymboso-disposita. Flosculi purpurei, 5 in numero, ligulatis. Involucrum anguste cylindricum, 8 mm longum, 2 mm in diametro, cujus phyllis 2-seriatis, externis brevissimis, longe ovatis, 1.8 mm longis, 0.8



图7 南川花佩。(蔡淑琴绘)
Fig. 7 *Faberia nanchuanensis* Shih.

mm latis, apice acutis, intimis longissimis, longe ellipticis, 8 mm longis, 1 mm latis, apice obtusis; omnibus extus glabris. Achaenia oblanceolata vel longe elliptica, compressa, 3 mm longa, 1 mm lata, facie costulis 4, margine late incrassata, apice in rostrum 1 mm longum subito constracta. Pappi setae externae e pilis brevissimis obscuris constantes; pappi setae internae e pilis numerosis tenuibus 4 mm longis efformantes; omnes albae.

Gansu (甘肃): Yuzhong (榆中), Xinglong Mt. (兴隆山), 1956-08-14, Huang He-Exped. (黄河队) 5958 (Typus, PE).

19 轮台鸦葱 新种

Scorzonera luntaiensis Shih, sp. nov. ——*S. tau-sahyz* auct. non Lipsch. et Bosse: Shih in Act. Phytotax. Sin. **25**: 41. 1987.

Species *S. parviflorae* Jacq. affinis, sed calathidiis minoribus, involucris anguste cylindricis 0.5 mm in diametro differt.

Herba perennis, 12—14 cm alta, tota glabra, radice verticicali, ramosa. 5 mm in diametro. Caulis erectus, gracilis, 1.5 mm in diametro, radicis collo vestigiis vaginarum foliorum obtecto. Folia radicalia leviter conferta, linearia, 1—2 mm lata, basi vaginaliter dilatata; folia caulina eis radicaulibus similia sed minora, in parte inferiore caulis praecique posita; omnia utinque glabra, apice acuminata, margine plana, nervis utrinque inconspicuis. Calathidia ad apicem caulis solitaria. Involucrum anguste cylindricum, 5 mm in diametro, eius phylla 5-seriata, exteriora ovata, 4 mm longa, 2.2 mm lata, apice acuta, media interioraque lanceolata vel longe lanceolato-elliptica, 1.4 cm longa, 2—3 mm lata, apice acuta; omnia extus glabra. Flosculi ligulati lutei. Achaenia matura ignota, juvenilia glabra. Pappi setae pro maximam partem plumosae.

Xinjiang (新疆): in itinere a Luntai ad Korlam (轮台至库尔勒途中), in locis humidis ad ripas, 1964-07-15, L. G. Zhu (朱格麟) 5359 (Typus PE).